

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-23. (Cancelled)

24. (Currently Amended) A digital broadcasting system, comprising:

a transmitter that transmits a first transport stream in a first service area, the first transport stream including:

links between first programs in the first transport stream in the first service area and second programs in one or more transport streams ~~in one or more adjacent service areas~~ in a second service area, and

priorities for the links; and

a receiver that receives the first transport stream including the first programs, the links, and the priorities for the links from the transmitter, and automatically selects, ~~when the receiver enters one of the adjacent service areas,~~ one of the second programs that corresponds to one of the first programs when the receiver moves from the first service area to the second service area, wherein the selecting includes:

using the links to locate the selected second program in the one or more transport streams in the second service area when the links identify a match between one of the first programs and one of the second programs, and

searching the second programs in order of the priorities, when the links do not identify the match[[.]] ;

wherein the second service area is adjacent to the first service area, and one or more second programs in the second service area are different from one or more first programs in the first service area.

25. (Previously Presented) The system of claim 24, wherein the transmitter describes the links and the priorities using a link descriptor in at least one of a network information table, a service description table, and an event information table.

26. (Previously Presented) The system of claim 25, wherein the transmitter identifies the priority of each link in a linkage_type field or in a private_data_byte field in the link descriptor.

27. (Currently Amended) A digital broadcasting transmitter, comprising:
a multiplexer unit; and
a system controller, wherein the multiplexer unit and the system controller provide a first transport stream in a first service area, the first transport stream including:

links between first programs in the first transport stream in the first service area and second programs in one or more transport streams in ~~one or more adjacent service areas~~ a second service area, and

priorities for the links, wherein~~[[:]]~~ the links allow ~~location~~ locating ~~[[of]]~~ one of the second programs that corresponds to one of the first programs, and

the priorities provide an order for searching the links to identify one of the second programs that corresponds to one of the first programs~~[[.]]~~ ;

wherein the second service area is adjacent to the first service area, and one or more second programs in the second service area are different from one or more first programs in the first service area.

28. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities in a network information table in the first transport stream.

29. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities in a service description table in the first transport stream.

30. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities in an event information table in the first transport stream.

31. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller rank the links based on the priorities.

32. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities

in a link descriptor in at least one of a network information table, a service description table, and an event information table.

33. (Previously Presented) The digital broadcasting transmitter of claim 32, wherein the multiplexer unit and the system controller identify the priority of each link in a linkage_type field or in a private_data_byte field in the link descriptor.

34. (Currently Amended) A digital broadcasting receiver, comprising:
receiving means for receiving, from a transmitter, a first transport stream
including first programs in a first service area, ~~extracting means for extracting, from a~~
~~first transport stream in a first service area;~~ links between the first programs in the first
transport stream and second programs in one or more transport streams in ~~one or more~~
~~adjacent service areas~~ a second service area, and priorities for the links; and

selection means for automatically selecting one of the second programs that
corresponds to one of the first programs when the receiver moves ~~into the adjacent~~
from the first service area to the second service area, wherein the ~~selecting~~ selection
means includes means for:

searching the second programs in order according to the priority based on
the links;

using the links to locate the selected second program in the one or more
transport streams in the second service area when the links identify a match
between one of the first programs and one of the second programs, and

searching the second programs in order of the priorities, when the links do not identify the match[[]] ;

wherein the second service area is adjacent to the first service area, and one or more second programs in the second service area are different from one or more first programs in the first service area.

35. (Previously Presented) The digital broadcasting receiver of claim 34, further comprising:

detection means for detecting a location of the receiver, wherein the selection means selects the program based on the location.

36. (Previously Presented) The digital broadcasting receiver of claim 35, wherein the detection means detects the location using a global positioning system.

37. (Previously Presented) The digital broadcasting receiver of claim 35, wherein the detection means:

receives input of location information; and

determines the location using the location information.

38. (Previously Presented) The digital broadcasting receiver of claim 34, comprising:

first receiver means for receiving the first transport stream; and

second receiver means for searching, using the selection means, for the program.

39. (Previously Presented) The digital broadcasting receiver of claim 34, wherein the selection means searches the links in order of the priorities.

40. (Currently Amended) A digital broadcasting receiver, comprising:
receiving means for receiving, from a transmitter, extracting means for extracting,
~~from~~ a first transport stream including first programs in a first service area, and links
between the first programs in the first transport stream and second programs in one or
more transport streams in ~~one or more adjacent service areas~~ a second service area;
and

selection means for determining priorities for the links ~~using the links~~ and for
automatically selecting one of the second programs that corresponds to one of the first
programs when the receiver moves ~~into the adjacent~~ from the first service area to the
second service area, wherein the selection means includes means for:

by searching the second programs in order of the priorities based on the links;

using the links to locate the selected second program in the one or more
transport streams in the second service area when the links identify a match
between one of the first programs and one of the second programs, and

searching the second programs in order of the priorities, when the links do
not identify the match;

wherein the second service area is one of adjacent service areas to the first service area, and one or more second programs in the second service area are different from one or more first programs in the first service area.

41. (Previously Presented) The digital broadcasting receiver of claim 40, wherein the selection means determines the priorities using a history of moving the receiver among the adjacent service areas.

42. (Previously Presented) The digital broadcasting receiver of claim 40, wherein the selection means determines the priorities using a pre-defined ranking of the adjacent service areas.

43. (Previously Presented) The digital broadcasting receiver of claim 40, wherein the selection means determines the priorities using the number of links for each adjacent service area.

44. (Currently Amended) A method ~~for digital broadcasting~~, comprising:
~~generating~~ receiving at a receiver, from a transmitter, a first transport stream including first programs in a first service area, a link descriptor, ~~the link descriptor :- describing~~ providing links between the first programs in the first transport stream and second programs offered in second transport streams in adjacent service areas a second service area, and ~~including~~ priorities for the links of the second transport

streams, each priority indicating an order for replacing the first transport stream with each second transport stream; and

automatically selecting one of the second programs that corresponds to one of the first programs when the receiver moves from the first service area to the second service area, wherein the selecting includes:

searching the second programs according to the priority for the links;

using the links to locate the selected second program in the one or more transport streams in the second service area when the links identify a match between one of the first programs and one of the second programs, and

searching the second programs in order of the priorities, when the links do not identify the match;

wherein the second service area is adjacent to the first service area, and one or more second programs in the second service area are different from one or more first programs in the first service area.

~~transmitting the first transport stream; and~~

~~selecting one of the programs when the receiver moves into the adjacent service area by searching the programs in the second transport streams in order of the priorities.~~